

AMENDMENTS TO THE SPECIFICATION:

Please insert the following heading and paragraph after the title and before the first line of text on page 1:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a division of Application No. 10/359,266, filed February 6, 2003; which was a division of Application No. 10/100,039, filed March 19, 2002, now USP 6,679,110; which was a division of Application No. 09/693,904, filed October 23, 2000, now USP 6,386,022; which was a division of Application No. 08/988,907 filed December 11, 1997, now USP 6,279,390; the entire content of each of which is hereby incorporated by reference in this application.

Please amend the paragraphs appearing at page 1, line 17 – page 2, line 20, as follows:

Generally, a thermostat which opens/closes in correspondence to the temperature of a coolant (cooling water) is provided in a coolant circulating path for circulating the coolant between a water jacket within an engine and a radiator in the water-cooled type engine. It is closed from the start of the engine until when the warm-up operation is completed to halt the circulation of the coolant to raise the temperature of the coolant quickly to the required temperature range and to improve the fuel consumption and to reduce noxious exhaust emission. The thermostat automatically opens when the temperature of the coolant on the engine side exceeds the required temperature range to circulate the low temperature coolant on the radiator side to the engine side to lower or maintain the temperature of the coolant on the engine side to the required temperature range.

As modes of malfunction of the thermostat, there are an open-malfunction during which the thermostat is kept opened and a closure-malfunction during which it is kept closed. When the open-malfunction occurs, the cold coolant within the radiator is

circulated to the engine from the beginning of start even during the cold start time during which the engine is started while it is cold, so that the temperature of the coolant on the engine side is hampered from rising after the start, thus retarding the warm-up of the engine and increasing the fuel consumption and noxious exhaust emission. When the closure-malfunction occurs, the cold coolant on the radiator side is not circulated even when the temperature of the coolant on the engine side exceeds the required temperature range, so that there is a possibility that the temperature of the coolant on the engine side keeps rising, causing an over-heat of the engine in the end.

Please amend the paragraph beginning at page 52, line 1, as follows:

In FIG. 34, when the coolant temperature THW detected by the engine side coolant temperature sensor 20 exceeds the thermostat opening temperature, the thermostat 13 opens when it is normal, so that the cold coolant on the radiator 15 side flows into the engine 11 side to suppress the coolant temperature from rising. Then, the coolant temperature drops below the thermostat opening temperature. When the coolant temperature THW drops below the thermostat closing temperature after that, the thermostat 13 is closed and the coolant is stopped from circulating from the radiator 15 side to the engine 11 side. Then, the coolant on the engine 11 side is warmed up by the heat of the engine 11 and the coolant temperature THW rises up more than the thermostat closing temperature. Accordingly, the state in which the coolant temperature THW drops largely below the thermostat closing temperature does not continue for a long period of time.

Please amend the paragraph beginning at page 59, line 4, as follows:

Thus, switching to the control mode by which the intake air amount is limited and ON time of the air-conditioner is limited reduces the load of the engine, prevent the engine from overheating and enables limp-home running to a service station. It is noted

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that it is possible to arrange so as to implement only either one of the limit of the intake air amount and the limit of ON of the air-conditioner.